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| APPLICATION NO.  | FILING DATE    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|----------------|----------------------|---------------------|------------------|
| 09/919,232   | 07/31/2001     | William J. Ossmann   | US010394            | 5552             |
| 7:   | 590 05/28/2002 |                      |                     |                  |
| AGILENT TECHNOLOGIES, INC.                                   |                |                      | EXAMINER            |                  |
| Legal Department, DL429 Intellectual Property Administration |                |                      | BUDD, MARK OSBORNE  |                  |
| P.O. Box 7599<br>Loveland, CO 80537-0599                     |                |                      | ART UNIT            | PAPER NUMBER     |
|  |                |                      | 2824                |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |  | Ale  |  |  |  |  |
|--|--|--|--|--|--|--|
| Office Action Summany  | Application No.  | Applicant(s) Oss mann                                      |  |  |  |  |
| Office Action Summary  | Examiner  M. Bull  | Group Art Unit   |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address   |  |  |  |  |  |  |
| Period for Response  |  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR RESPONSE IS S<br>MAILING DATE OF THIS COMMUNICATION.  | ET TO EXPIRE 3   | MONTH(S) FROM THE  |  |  |  |  |
| <ul> <li>Extensions of time may be available under the provisions of 37 CFR 1 from the mailing date of this communication.</li> <li>If the period for response specified above is less than thirty (30) days,</li> <li>If NO period for response is specified above, such period shall, by def</li> <li>Failure to respond within the set or extended period for response will,</li> </ul> | a response within the statuto<br>ault, expire SIX (6) MONTHS | ory minimum of thirty (30) days will be considered timely. |  |  |  |  |
| Status   |  |  |  |  |  |  |
| ☐ Responsive to communication(s) filed on  |  |  |  |  |  |  |
| ☐ This action is <b>FINAL</b> .  |  |  |  |  |  |  |
| <ul> <li>Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 1 1; 453 O.G. 213.</li> </ul>   |  |  |  |  |  |  |
| Disposition of Claims  |  |  |  |  |  |  |
| X Claim(s)   | is/are pending in the application.                           |  |  |  |  |  |
| Of the above claim(s)  | is/are withdrawn from consideration.                         |  |  |  |  |  |
| ☐ Claim(s)   | is/are allowed.  |  |  |  |  |  |
| □ Claim(s)   | is/are rejected.   |  |  |  |  |  |
| , □ Claim(s)   | is/are objected to.  |  |  |  |  |  |
| ☐ Claim(s)   |  |  |  |  |  |  |
| Application Papers requirement.  |  |  |  |  |  |  |
| ☐ See the attached Notice of Draftsperson's Patent Drawing   | g Review, PTO-948.   |  |  |  |  |  |
| ☐ The proposed drawing correction, filed on is ☐ approved ☐ disapproved.   |  |  |  |  |  |  |
| ☐ The drawing(s) filed on is/are objected to by the Examiner.  |  |  |  |  |  |  |
| ☐ The specification is objected to by the Examiner.  |  |  |  |  |  |  |
| ☐ The oath or declaration is objected to by the Examiner.  |  |  |  |  |  |  |
| Priority under 35 U.S.C. § 119 (a)-(d)   |  |  |  |  |  |  |
| <ul> <li>□ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).</li> <li>□ All □ Some* □ None of the CERTIFIED copies of the priority documents have been</li> <li>□ received.</li> </ul>   |  |  |  |  |  |  |
| <ul> <li>□ received in Application No. (Series Code/Serial Number)</li> <li>□ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).</li> </ul>  |  |  |  |  |  |  |
| *Certified copies not received:  |  |  |  |  |  |  |
| Attachment(s)  |  |  |  |  |  |  |
| ☐ Information Disclosure Statement(s), PTO-1449, Paper N   | nterview Summary, PTO-413                                    |  |  |  |  |  |
| Notice of References Cited, PTO-892  | Notice of Informal Patent Application, PTO-152               |  |  |  |  |  |
| ☐ Notice of Draftsperson's Patent Drawing Review, PTO-94   | Other  |  |  |  |  |  |
| Office Action Summary  |  |  |  |  |  |  |

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Claims 16 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are vague, indefinite and misdescriptive in that, there is no structure capable of being the "means for accessing an acoustic window of a body...". It is the operator, observing the body and/or image on a screen that does the "accessing". Transducer structure per se is not a "means for accessing".

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 4, 6-15, 18, 19 and 21 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Shimazaki or Kobayashi.

Kobayashi (fig. 9B) and Shimasaki (fig. 8) both teach the acoustic imaging system including a protective lens over the transducer matrix, a hand held applicator body and electronic focusing circuitry.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

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would have been obvious to one of ordinary skill in the art.

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to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 5, 16, 17, 20 and 22 rejected under 35 U.S.C. 103(a) as being unpatentable over

Shimazaki or Kobayashi.

The references teach the claimed structures except for the same specific impedance valves for the matching layer. However, it has long been held that optimization of a known device (e.g. thru routine experimentation) is within the skill expected of the routineer. Thus to ascertain specific optimum valves for any particular application of the devices of Kobayashi or Shimazaki

Regarding claims 16, 17, 20 and 22, note that it would have been self revealing to an operator if a bone was interfering with imaging the desired organ, and it would then have been obvious to one of ordinary skill in the art to move the probe to a location with a clear view of the desired body part.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimazaki or Kobayashi in view of Slayton or Ishrak.

Shimazaki and Kobayashi teach the transducer using a flat arrangement of the transducer elements. However, each of Slayton and Ishrak teach using either a flat or a curved array of transducer elements depending on the job requirements. Thus, for the reasons taught by Ishrak or Slayton, it would have been obvious to one of ordinary skill in the art to provide Kohayashi or Shimazaki with a curved array.

Further cited of interest are Gilmore, Umemura, Lorraine and Green.

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